Appl. No. 10/772,488
Amdt. dated November 7, 2007
Reply to Office Action of July 12, 2007

Amendments to the Drawings

        Please replace Fig. 1 with the enclosed revised drawing sheet, which corrects a reference

numeral error noted by the Applicants.

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<center>Remarks</center>

The present amendment responds to the Official Action dated July 12, 2007. A petition

for a month extension of time and authorization to charge our credit card the one month

extension fee of $120 accompany this amendment. The Official Action objected to the

specification. The Official Action objected to claim 10. The Official Action rejected claim 1

under 35 U.S.C. 102(e) based on Hennecke U.S. Publication No. 2004/0034527 (Hennecke).

The Official Action rejected claims 1, 2, 8-10, and 12-15 under 35 U.S.C. 103(a) based on

Hennecke in view of Robinson Great Britain Patent No. GB2375211 (Robinson). The Official

Action rejected claims 3-7, 13, and 16 under 35 U.S.C. 103(a) based on Hennecke in view of

Robinson and further in view of Chang U.S. Publication No. 2003/0091028 (Chang). These

grounds of rejection are addressed below. A replacement drawing sheet is submitted here with to

correct a duplicate reference numeral noted by the Applicants. The specification has been

amended. Claims 1, 8, 10, and 12 are presently pending.

The Objection to the Specification

The Official Action objected to the specification because an incorporation by reference of

a co-pending application omitted the serial number of the application. The specification has been

amended to overcome this deficiency, so the present objection should be withdrawn.

The Objection to the Claims

The Official Action objected to claim 10. Claim 10 has been amended as suggested by

the Examiner, so the present objection has been overcome and should be withdrawn.

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The Art Rejections

As addressed in greater detail below, Hennecke, Robinson and Chang do not support the

Official Action's reading of them and the rejections based thereupon should be reconsidered and

withdrawn. Further, the Applicant does not acquiesce in the analysis of Hennecke, Robinson,

and Chang made by the Official Action and respectfully traverses the Official Action's analysis

underlying its rejections.

The Official Action rejected claim 1 under 35 U.S.C. 102(e) based on Hennecke. In light

of the present amendment to claim 1, this ground of rejection is respectfully traversed.

Claim 1, as amended, addresses a voice recognition module for receiving voice inputs

from a user and performing voice recognition on the voice inputs. Performing voice recognition

on a voice input comprises identifying members of a collection of elements representing potential

matches to the voice input. The voice recognition module is operative to prepare a list of

potential voice recognition results for a voice input under consideration. Each of the potential

voice recognition results represents a candidate for a result matching the voice input received

from the user. Claim 1 further comprises a results postprocessor for processing the list of

potential voice recognition results to improve speed and accuracy of voice recognition. The

results postprocessor is operative to make changes to the list based on information relating to

past results of recognition attempts in order to associate a higher priority with members of the list

having a higher likelihood of matching the voice input under consideration as indicated by the

past results of recognition attempts. The limitations of claim 1 in the claimed combination are

not taught and are not made obvious by Hennecke.

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Hennecke addresses voice recognition in order to match a user's voice input against "list elements," which are members of a collection of data against which a user's voice input is to be matched. Hennecke uses first and second recognition procedures with different vocabularies, allowing a user to speak a whole word which is broken into subunits that are used as a vocabulary used by a second recognition procedure. However, Hennecke does not create a list of candidate matches and then make changes to the list based on past recognition results in order to adjust priorities of members of the list. Instead, Hennecke simply performs a two step recognition procedure to generate a match or a list of potential matches to be presented to a user. The creation of a results list and the use of past results to adjust the list allows for the adjustment of the list based on factors such as user rejection of potential results, allowing for an additional class of data beyond the phonetic analysis of voice inputs and matching results. Claim 1, as amended, therefore defines over the cited art and should be allowed.

The Official Action rejected claims 1, 2, 8-10, and 12-15 under 35 U.S.C. 103(a) based on Hennecke in view of Robinson. In light of the present amendments to claims 1, 8, and 12, this ground of rejection is respectfully travsersed.

With respect to claim 1, the Official Action relies on Robinson to supplement Hennecke by providing a clearer example of the use of past recognition attempts to reorder a results list. However, Robinson uses past recognition information to refine and adapt features such as user models, which adapt the behavior of a voice recognition system in selecting matches of a voice input to elements of a collection of data. Robinson is directed to actions analogous to the initial assembly of the results list of claim 1, rather than adjustment of the list once created. The

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creation of a list and the adjustment of the list based on past recognition results allows for a

relatively simple and efficient adjustment mechanism for a list of candidates based on selected

characteristics of the candidates, and may easily be adapted to a current voice recognition

attempt. The teachings of Robinson, by contrast, are more directed toward overall refinement of

a system, rather than to addressing any one recognition attempt. Claim 1, as amended, therefore

defines over the cited art and should be allowed.

Claim 8, as amended, addresses a repository of information relating to a current voice

recognition attempt. Claim 8 further claims a processing module for processing potential voice

recognition results in a result list. The voice recognition results represent members of a

collection of elements representing potential matches to a voice input under consideration in a

current voice recognition attempt. The processing module is operative to examine information in

the repository relating to the current voice recognition attempt and to make changes to a results

list compiled in response to a voice input. The changes are made based on the information stored

in the repository and associate a higher priority with results in the results list that are indicated to

have a higher priority of matching the voice input based on information in the repository. The

limitations of claim 8 in the claimed combination are not taught and are not made obvious by

Hennecke, Robinson, or a combination thereof. The Official Action admits that Hennecke does

not adequately disclose a processing module operative to examine information affecting a current

voice recognition and change the results accordingly, but relies on Robinson to address this

deficiency. However, as noted above with respect to claim 1, Robinson does not build a results

list analogous to the results list as claimed by claim 8 and then change the results, but instead

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undertakes an ongoing refinement process that influences how the results list will be constructed. Claim 8, as amended, therefore defines over the cited art and should be allowed.

Claim 12, as amended, comprises examining a list of recognition results representing candidates for matches to a voice input from a user. The candidates are members of a collection of data selected as potential matches to a particular voice input under consideration. The list is compiled in response to the voice input under consideration. Claim 12 further claims making changes to the list based on based on information relating to results of past recognition attempts, to associate a higher selection priority with members of the list indicated as having a higher priority of matching the voice input based on the results of past recognition attempts. As noted above with respect to claim 1, Hennecke does not use past recognition results to make changes to a list of potential results but instead uses a two step recognition process involving multiple vocabularies, and Robinson does not address making changes to a list of candidate results but instead refines the initial creation of a results list. Claim 12, as amended, therefore defines over the cited art and should be allowed.
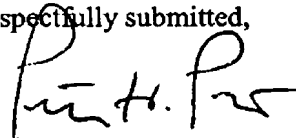
The Official Action rejected claims 3-7, 11, and 16 under 35 U.S.C. 103(a) based on Chang. Claims 3-7 are dependent claims having claim 1 as a base claim, claim 11 is a dependent claim having claim 8 as a base claim, and claim 16 is a dependent claim having claim 12 as a base claim. Because claims 1, 8, and 12 have been shown to be allowable, claims 3-7, 11, and 16 should also be allowed.

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Conclusion

All of the presently pending claims, as amended, appearing to define over the applied

references, withdrawal of the present rejection and prompt allowance are requested.

Respectfully submitted,

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ANNOTATED SHEET
showing changes

503059-A-01-US
SERIAL NO.: 10/772,488
PETER H. PRIEST (919-806-1600)

1/3

FIG. 1

100

104 SERVER

106 PROCESSOR

108 MEMORY

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LONG TERM STORAGE

102 CENTRAL EXCHANGE

103A

103N

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126 RECOGNITION RESULTS POSTPROCESSOR

128 USER DATA REPOSITORY

130 USER MODEL

132 LIKELY CONTACT CACHE

134 RESULTS HISTORY FILE

120 VOICE RECOGNITION MODULE

125 ATTEMPT COUNTER

122 USER INTERFACE MODULE

118 INFORMATION LOOKUP MODULE

124 RECOGNITION RESULTS LIST

112 DIRECTORY LOOKUP MODULE

114 VOICE DIALING MODULE

116 VOICE MAIL MODULE